

Shelter as a Workplace

Towards a conceptual framework for integration of home and workplace for lower income people of Dhaka, Bangladesh.



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The history of Bangladesh is an eventful combination of turmoil and peace, as well as prosperity and destitution. It has thrived under the glow of cultural splendor and suffered under the ravages of war. The territory now constituting Bangladesh was under the Muslim rule for over five centuries from 1201 to 1757 A.D. The British ruled over the entire Indian sub-continent including this territory for nearly 190 years from 1757 until Britain withdrew in 1947. With the termination of the British rule in August, 1947 the subcontinent was partitioned into India and Pakistan. Bangladesh was then a part of Pakistan and was known as East Pakistan. It remained so for about 24 years from August 14, 1947 to March 25, 1971. Following the victory in the War of Liberation, it appeared on the world map as an independent and sovereign state on December 16, 1971.

The Population of Bangladesh is now more than 150 million. According to the population size Bangladesh is the 8th largest country and according to the land area it is 90th in the world. As a result it has the highest density of population in the world. At present, the rate of urbanization in the country is very high which is more than 7% per annum where the natural increase is only 1.48%. Forecasting indicates that by 2015, more than half of the people will be living in urban areas (Kabir, Mohammad and Tariquzzaman 2007).

Shelter Situation Analysis

The economy has grown 6% over the past few years despite inefficient state-owned enterprises, insufficient power supplies, and slow implementation of economic reforms. Bangladesh remains a poor, overpopulated, and inefficiently-governed nation. Although more than half of GDP is generated through the service sector, nearly two-thirds of Bangladeshis are employed in the agriculture sector, with rice as the single-most-important product. Garment exports and remittances from Bangladeshis working overseas, mainly in the Middle East and East Asia, fuel economic growth.

The poor economic situation and income inequality in the country is reflected in the quality and quantity of the housing stock. It was estimated that close to half of all housing units in the country were made of temporary materials and needed replacement within a 1 to 5 year period. Approximately one third of all houses in urban areas were constructed outside of the formal regulatory system, mostly on land to which the homeowner do not have a formal title. A survey of Greater Dhaka showed that there were 2,100 slums which comprised 3 million people (MHPW 1993).

Total number of dwelling units in the country is 19,020,489 of which Rural is 15,474,566 and Urban 3,545,923 (Marja C. Hoek-Smit 1998) . The population of Dhaka is presently over 13 million and recent trend shows that every year 0.5 million increase in population is natural. The estimated requirement for housing units in urban areas vary from 300,000 units to 550,000 annually for the next twenty years depending on the number of backlog and replacement units incorporated in the estimates (Hoek-Smith,1999). And about the quality and standard issue it is not difficult to foresee what might be the scenario of a country when its 36% population lives below US\$ 1 a day.

Occupancy level is 5.48 p/dwelling unit , and housing standard per capita floor space in the country is 54.9 sq.ft. (Marja C. Hoek-Smit 1998). The available tenure pattern shows that 60% of the urban dwellings are owner occupied and 40% are rented.

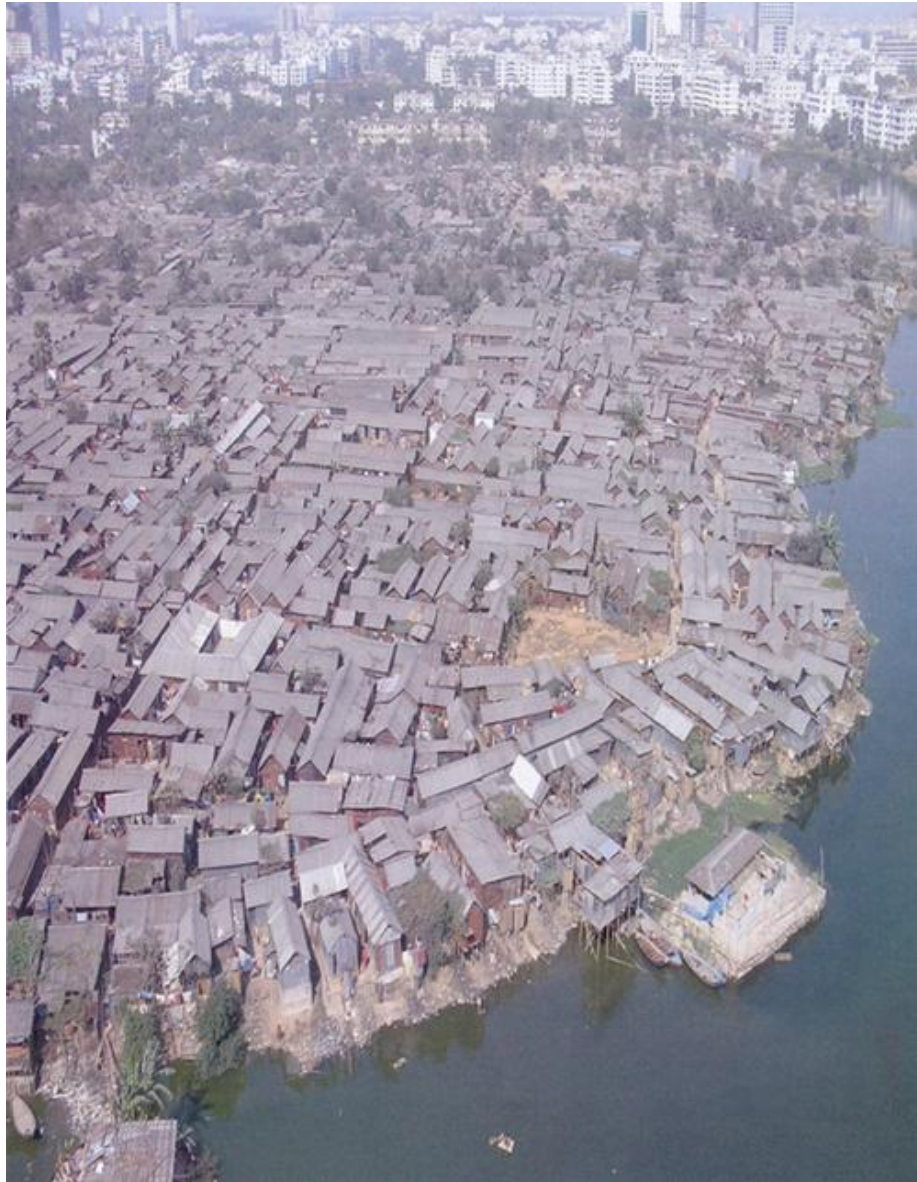


Fig 1: Mohakhali area of Dhaka city.

However it is important to note that in Dhaka the tenure pattern is substantially different about 70% of the total housing stock in Dhaka is rented (Ministry of Housing and Public Works 2001). A major (almost 50%) portion of private rentals is slum type. While another significant section is squatters occupying public land (Ministry of Housing and Public Works 2001).

The shortage in supply of housing is, extremely acute for low-income group indicated by average rent (Tk 8.07/sq ft) being more than the middle income group (Tk 6.85/ sq ft). In terms of rent income ratio, it is found that the middle and lower income group have to pay about one fourth of their total income in housing. While the poor can not afford to spend more, they have to remain satisfied with very small amount of space, which is already reflected by per capita floor space they occupy (Nabi ASMM. et al 2003).

Higher land price and construction cost has pushed housing beyond the affordable range of low and middle income people. The ratio of the median free-market price of dwelling unit and the median annual household income marginally increased within last few years. This ratio was 18.5 in 1993 and 18.93 in 1996. In recent years the government has become aware of the need for low-income housing (Ministry of Housing and Public Works, 2001).

Land is the scarcest resource in urban areas. The price of the land accelerates much faster than any commodity. The major reasons behind such a situation are limited supply of land, high demand and speculative market. A major portion of private rentals is slum type, while another significant section is squatters in illegally occupied public land. Besides private real-estate developers, Government also produces planned urban area but both are affordable by only higher income people. Though each city had a formal plan, it exist only in paper. In reality it is the informal development which has made the city sprawl.



Fig 2 & 3: Mohammadpur area of Dhaka city.

The rapid population growth of Dhaka in turns leads to the rapid city expansion in both vertically and horizontally. Expansion of residential use by informal development by middle and low income housing made urban sprawl all around the main built up area. Majority of these construction are temporary in nature while many of the permanent structures do not have building permission. Within the inner city area the built up development is totally mixed use in nature. Apart from a few high class residential areas rest of the area is developing in a mixed use pattern. Changes in the land use and building structures came under great pressure by private sector investment in real estate development. Residential, commercial, institutional and mixed uses are a result of economic development also viewed as globalisation phenomenon (Shafi S.A 2006). Overcrowding is evident from the high population density of more than almost 1,000 persons per acre in some of the settlements in Dhaka (CUS et al, 2006). (Ahmed K. I 2007).

Organization

The author is involved with Siza Development Company Limited, which is a real estate company as well as an architectural consulting firm, established in 1989. Private real estate companies are comparatively new in Bangladesh, it is only early 80s when private real estate companies evolved. Siza Development Company is among the first 20 companies in the country, where the total number unit finished now is more than 100. It does joint-venture project in a very selective way. It normally involves not more than two projects at a time. In that sense it is not a very commercial company in compares to others in the market. Normally it works for higher middle income group of people. It also did a project for lower middle income group of people, though the project is successful but the company could not make expected profit from the specific project. The company is well reputed for caring social needs and for providing better environmental quality among its clients.

Ahsanullah University of Science and Technology is the first technical private university in Bangladesh established in 1995, were the author also teaches in its Department of Architecture. Now there are more than 7 private universities where there are architecture departments. But department of architecture in Ahsanullah University is ranked 1st among all the private universities in the country. In the course curriculam functional solution of residence is taught in 2nd year. In the 3rd

year ‘design of multy family dwelling’ is taught. And in 4th year there occurs extensive study on ‘housing’ and in studio there is taught ‘housing design’ for different income people. Apart that regular practice, Shelter Design for distressed people, flood or cyclone effected design experiments also done in different years.

Shelter Problem : Shelter and Shelter related problems are extensively vast and severe in the country like Bangladesh. In operational term to mitigate the problem, we may identify some major targets as below.

- The reduction of poverty through better access to employment and income enhancement.
- Access to quality housing and livable space and working environment.
- Improved physical environment, in home and access to road, open spaces.
- Access to improved water supply, sanitation and electricity and gas.
- Security of life and property.

Proposal for Change and Improvement

Change and Improvement of Shelter situation would be derived from multi-disciplinary and multi-dimensional activities, which may act separately but must be coherent. In this context the author proposes to approach the issue from one of the above targets for ‘The reduction of poverty by creating opportunities through better access to employment and income enhancement’ considering “Shelter as a Workplace”.

Shelter as a Workplace: People in every society have some type of houses, though their form and permanence vary widely. The homes are more or less universal. It is often observed that in many societies, homes are one of the most important places in their life. Homes offer physical amenities that sustain and support the residents, and they are often essential for the very survival of their occupants (Altman and Werner1985). Furthermore homes can be important centre for generating income for a better life and living.

Working from home is not a new phenomenon; the basic work environment, having evolved from artisan's atelier, scholar's den to consultant's chamber. Working at home can fit in many areas of life, such as family commitments and entertaining relatives, allowing greater flexibility and freedom to work round the clock, even in casual dress and when one is most productive. But after industrial revolution situation changed rapidly and in most of the cases things took place without having bearing on the basic human need and social reality. Families often lost their roles and independence and traditional relationship between life and work was broken. The city was now conceived as a machine to make money (Hatch, C.R. 1984).

A house as a commodity can be used by its users in different ways at the same time, so the same space may act as a transformable resource. Integrating home and workplace could also benefit one economically and socially as it spares one to maintain two places separately. Working at home is not merely a business decision but an important lifestyle choice (Gaventa, S. 1998). This concept can bring a change in the way one works, the way one spends his/her leisure time and the way one views his/ her home as well as workstation. It could not only reduce transportation cost radically but also may reduce traffic and transportation hassle both for the person himself and for the city dwellers. For large number of people who have to combine work with bringing up children, it could provide a flexible and manageable solution to the child upbringing responsibility.

Employment and the Poor: Poor peoples services, which is not only necessary but essential for the capital city of Dhaka, varies in ranges and sectors. Similarly unemployment is also a major issue when dealing with urban poverty. The unemployment rate for the poor is almost double than that of the non-poor. Underemployment is an even broader problem, affecting about 20 percent of households (The World Bank Office, Dhaka). These unemployed people could have great opportunity to find a way of working from home.

Different types of professions serving from home:



Fig 4 & 5: Men, curving shell ornaments at the front door of their home.



Fig 6 & 7: Women, tailoring at home and displays and also sell them from there.



Fig 8 & 9: Tea stall and mini grocery at front and behind there is operator's shelter.



Fig 10 & 11: Person selling sugarcane and sometimes rice cake on the train track and lives in the shelter behind, where his wife prepares and supplies the products.

Shelter and Workplace of a Dress Artisan:



Fig 12: Artisan working with his family members. Fig 13: Congested living and working place. Fig 14: Wherever possible working tools are stored.



Fig 15: Raw materials are stored under the working bed. Fig 16: Potteries are stored wherever spaces are found.



Fig 17: Finished Product is stored in the shelved trunk. Fig 18: Exterior view.



Fig 19 & 20: Temperature is so uncomfortable that they had to open the ceiling.

Similarly child labour is quite prevalent, with approximately 20 percent of all children between ages 5-14 working. Most of the child workers are between 10 and 14 years old, with similar proportions for boys and girls (The World Bank Office, Dhaka). In the poorest households earnings from the children are significant, representing about one third of total household income. If these children could work from their own home, the opportunities of education and better human rights could be advanced.

SWOT Analysis

The **strength** of the proposal is that many people are already working at home, specially in low income group and they informally use their home as a workplace. And most of the cases there are very low or no negative impact that prevails, from the view point of the users. The proposal also reduces transportation and other costs. It is less time consuming in getting to and returning from ones place of work. It provides opportunity to spend more time with and for their family. So it would be lucrative for many people. Here the domestic space becomes an added resource, especially for the lower income group of people.

The **weakness** is in some of the prevailing by-laws which often prevent informal economic activities from home. Sometimes it may be difficult to organize work from home, as in most of the cases it is found that there are only a few of the same kind of business running together or running in proximity within a neighborhood.

There are good **opportunities** within the proposal, because the people of Bangladesh always become encouraged when they find other people of the same economic and social strata, getting to do something better to improve their lot. There are innumerable economic and social benefit packages available from Government, Foreign Donor Agencies and NGOs. These measures properly organized and channeled, for the poor people working from home, can contribute to a better economic and social life for a large section of the urban poor. Secure working place and safe commutation to and from the place of work specially for the women and children is a major challenge for Dhaka's urban poor. Provision of working from home would indeed address a major social problem for the children and women of the community of the urban poor.

The vicious poverty circle itself is always a **threat** for anything to be initiated for the poorest of the poor. Because it is difficult to organize, train and create capacity building, among the lower income people, even who can work or are already working. Thus they continue to work in the same unfavorable condition without a chance of creating a better working and living environment.

Survey Findings: The author has conducted survey on the low income people like Tea seller and grocer, Sugarcane and rice cake seller , Shop keeper, Tailor, Artisan of ornamental embroidery on dresses, Shell ornament maker, Cheap restaurant owner, Building model maker, Private tutor, etc.who work from home both in new and old part of Dhaka.

The survey reveals that like many other part of the world, there are quite a good number of lower-income group of people in Dhaka who choose their home for income generation rather than working outside. Reasons varies and sometimes found common regarding economic activities running from home. From the survey it is seen that following reasons make one prefer to work from home.

i) The person can manage his/her job comfortably from home or does not have the ability to maintain a business place separately.

ii) It saves his/her transportation cost.

iii) It also saves his/her valuable travel time especially in the city like Dhaka where in any street, there is always traffic jam and unproductive lost hours. It also saves energy and allows the worker to work more at home.

iv) It offers more time to take care of the children and properly their upbringing. Social interaction improves when a person works from his/her home.

v) A person, especially the women feels safer when she or her husband works at home.

vi) People who prefer working from home think that their workplace is peaceful.

vii) Easy time management and in some cases other members of the family can also pitch in and contribute to the work in their free time.

Survey also show that often the low income people who work from home did other jobs earlier and started working at home very informally and for some people, work at home is their secondary job and in some cases, it finally becomes their primary job. As their economic condition was poor before that sharing of the same space for working and living in the same space is not an issue for them. However, storage facilities of their product are always a problem to them. They try to manage the storage problem by putting the storage under the beds or hanging them from the ceiling. The people, whose economic condition is better than before, can now identify that better lighting and ventilation is needed at their work place at home. Supply of service facilities are found always scarce as almost the whole of Dhaka is short of that.



Fig 21: Women, herself tailoring at home. Fig 22: Tailor's daughter is studying under her guidance inside .



Fig 23 & 24: Women, working tailoring at home. Also creates job for her neighbours.



Fig 25 : Storage facilities are on the walls and ceiling. Fig 26: Exterior view, workplace on left and living space on the right.

Activities and arrangements in the Shelter and Workplace of the Female Tailor:



Fig 27: The Lady working from home and also taking care and teaching tailoring to her young daughter.

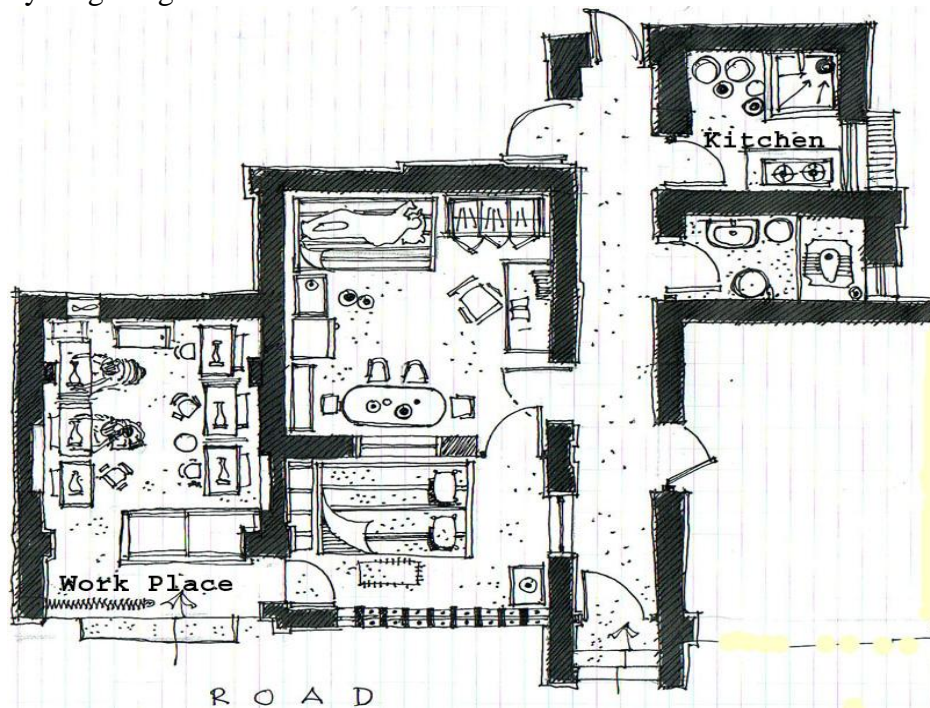


Fig 28: Plan of the home which works also as workplace.



Fig 29 : Sectional Elevation, Workplace on the left, Living place on right side.

Action Plan : Towards a conceptual framework for integration of home and workplace for lower income people of Dhaka:

State Level:

- i) The Government and the Law enforcing authority have to understand that 'informal is normal' for a large section of our society and this informal sectors have great impact on the economy of a third world country and act or react accordingly.
- ii) If the work is not hazardous to the neighborhood, it should be allowed and zoning by-laws need to be revised.
- iii) Basic utility services like water, electricity, gas should be ensured in their names for uninterrupted production.
- iv) Banks and other micro-credit organizations may be encouraged to extend loan facilities to the people who produce from home.
- v) Institutional arrangement needs to be extended, through NGOs and other supporting organization. They should be encouraged to come forward to the home entrepreneurs for supplying raw materials for the work and marketing the products.
- vi) Training facilities for the upliftment and improvement of human resources and community empowerment such as the management training, foundation skill training, etc needs to be introduced.

Design Level :

- i) The houses, where people work too, should have proper arrangement to cope with home working environment, and as such the design needs to be more flexible.
- ii) Proper lighting and ventilations is to be encouraged.
- iii) It is necessary to pre determine the storage facilities.
- iv) The internal environments should be designed so that it functions efficiently and cater for local climatic considerations.
- v) Raise and implement innovative ideas to minimize building construction cost.
- viii) The design solution would be such that it can cope with all necessary technological advances within the available resources.
- viii) Traditional wisdom may be adopted to the contemporary context.

Worker Level:

- i) As there is no fixed work schedule one has to be self disciplined while working at home.
- ii) The organization and share of the space and time would be justified because the same home is used for dual purpose.
- iii) The home worker has to be aware that primarily it is his/her home and then it is his workplace, so one has to be careful and responsible both at home and at neighbourhood level.
- iv) Other family members should also be aware of the situation that their home is not only a living place like most others, but simultaneously a working place.

Conclusion

Of the many problems of the City of Dhaka, the problems of shelter and employment is of an enormous magnitude and any shelter program interwoven with poverty reduction strategy for the city will require major policy shifts on many fronts. There is mismatch between the actual need and given schemes in our cities but through proper planning, desired social and physical change can be achieved. Dwelling space available to a household, for particular sections of our people, could well be seen as a force of production in relation to home based employment generation. The provision for proper working facilities at home might well become a significant change agent for overall improvements in the city's performance, which indeed can to some extent reduce the need for travel thereby reducing pressure on transport system, commercial and industrial spaces.

In a nutshell, the concept of "Shelter as a Work place" may have a multiplier effect on poor peoples well being and city's overall environment.

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